

Exhibit L

(Part 1 of 2)

United States Patent [19]

Lynch et al.

[11] Patent Number: **4,936,587**[45] Date of Patent: **Jun. 26, 1990**[54] **GOLF BALL**[75] Inventors: **Francis deS. Lynch, Mattapoisett; John W. Jepson, Marion; Robert A. Brown, Mattapoisett, all of Mass.**[73] Assignee: **Acushnet Company, New Bedford, Mass.**[21] Appl. No.: **213,056**[22] Filed: **Dec. 4, 1980****Related U.S. Application Data**

[63] Continuation of Ser. No. 91,087, Nov. 5, 1979, abandoned, which is a continuation of Ser. No. 920,396, Jun. 29, 1978, abandoned, which is a continuation of Ser. No. 816,882, Jul. 18, 1977, abandoned, which is a continuation of Ser. No. 716,100, Aug. 20, 1976, abandoned, which is a continuation of Ser. No. 363,353, May 24, 1973, abandoned, which is a continuation-in-part of Ser. No. 236,318, Mar. 20, 1972, abandoned.

[51] Int. Cl.⁵ **A63B 37/14**[52] U.S. Cl. **273/232; 273/218**[58] Field of Search **273/232**

[56]

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Primary Examiner—George J. Marlo

Attorney, Agent, or Firm—Lucas & Just

[57]

ABSTRACT

Dimples on a golf ball are interrelated by dimple number, dimple diameter and dimple depth and are arranged on the surface of the golf ball in a manner which enables the golf ball to travel further. At least about 80% of the distances between the closest points of the edges of adjacent dimples are less than about 0.065 inches and at least about 55% of the distances between the closest points of the edges of adjacent dimples are greater than about 0.001 inches.

Dimple number, dimple diameter and dimple depth are also interrelated in a specific manner according to the formula:

$$s = \left[\frac{83.15(d - x) - 55.56(D - y)}{a} \right]^2 +$$

$$\left[\frac{83.15(D - y) + 55.56(d - x)}{b} \right]^2$$

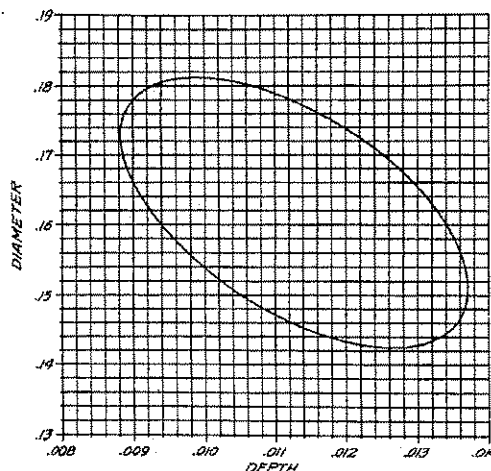
wherein:

d=average depth of all dimples in inches

D=average diameter of all dimples in inches

S=computed unknown (1.0 or less for present invention)

x, y, a and b are dependent on the number of dimples.

37 Claims, 12 Drawing Sheets**315 DIMPLES (FORMULA 1)**Patent provided by Sughrue Mion, PLLC - <http://www.sughrue.com>

4,936,587

Page 2

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U.S. Patent

Jun. 26, 1990

Sheet 1 of 13

4,936,587

FIG. 1

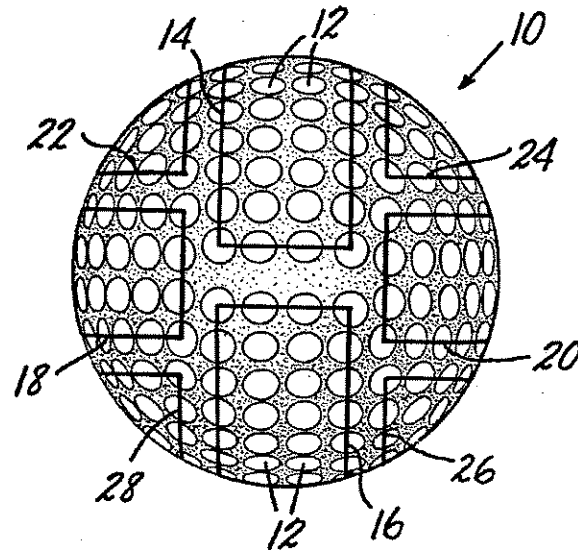
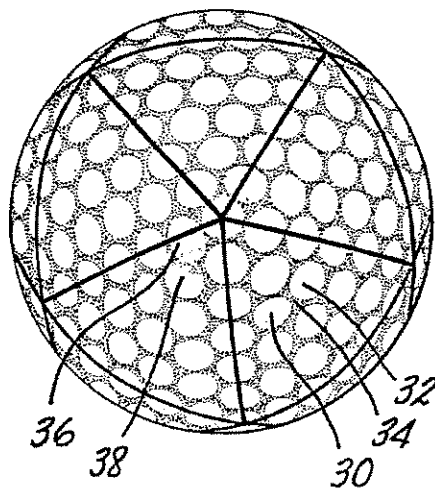


FIG. 2



U.S. Patent

Jun. 26, 1990

Sheet 2 of 13

4,936,587

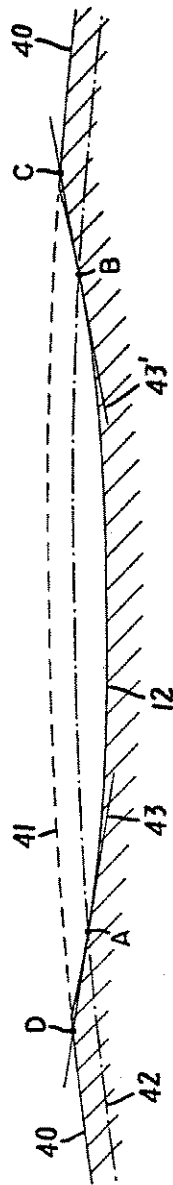


FIG. 3

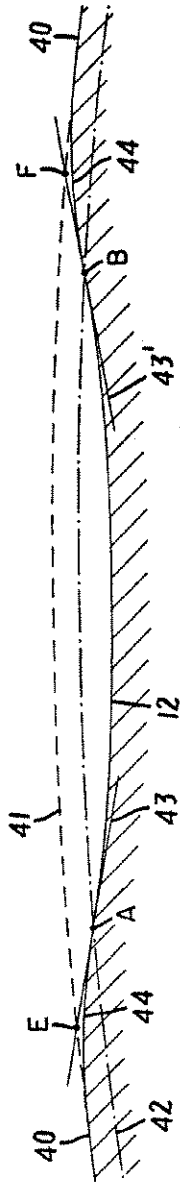


FIG. 4

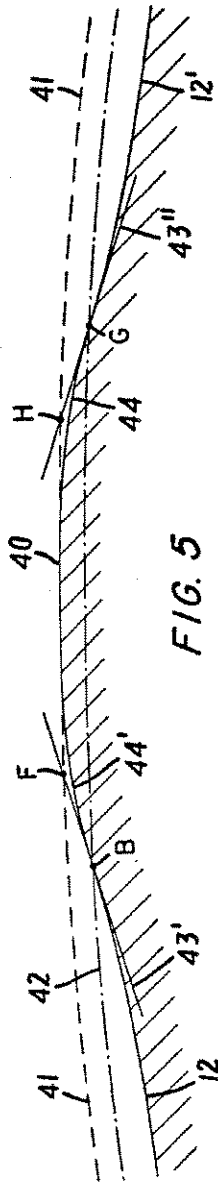


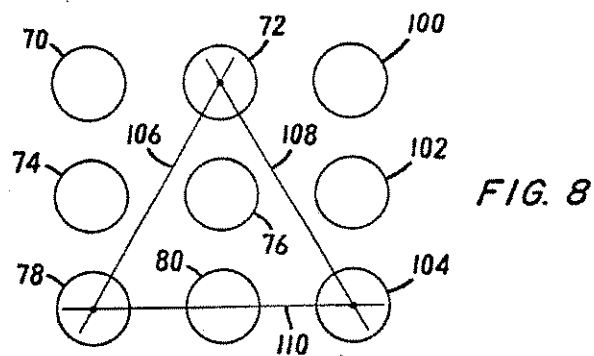
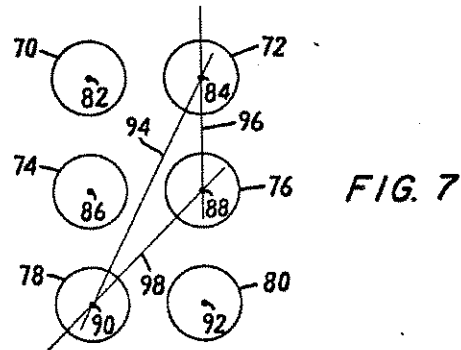
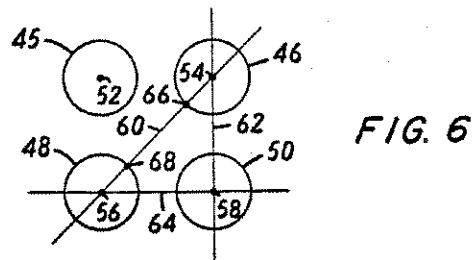
FIG. 5

U.S. Patent

Jun. 26, 1990

Sheet 3 of 13

4,936,587



U.S. Patent

Jun. 26, 1990

Sheet 4 of 13

4,936,587

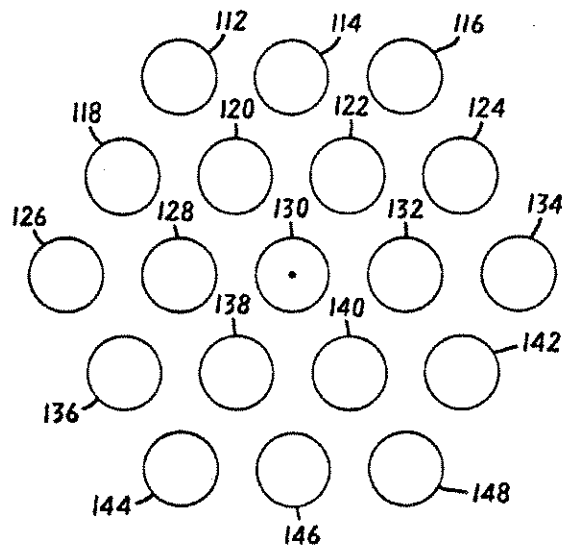


FIG. 9

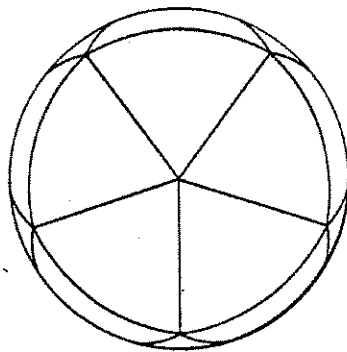


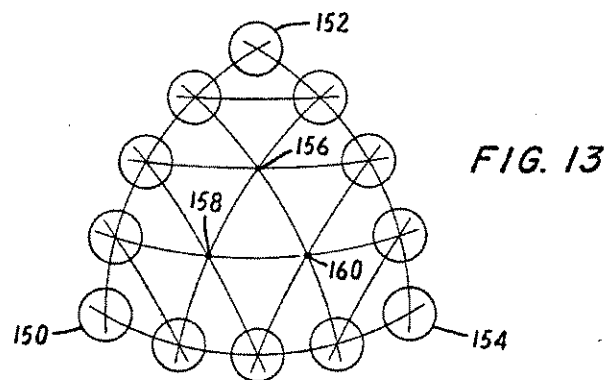
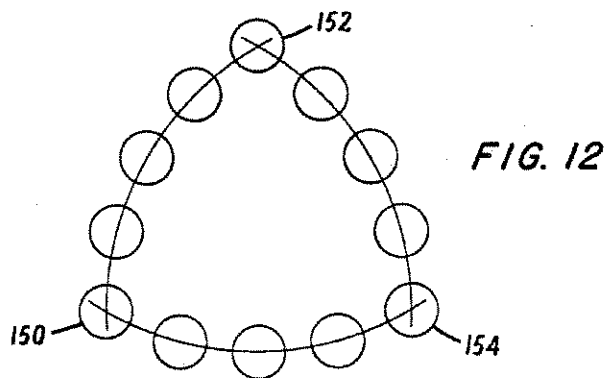
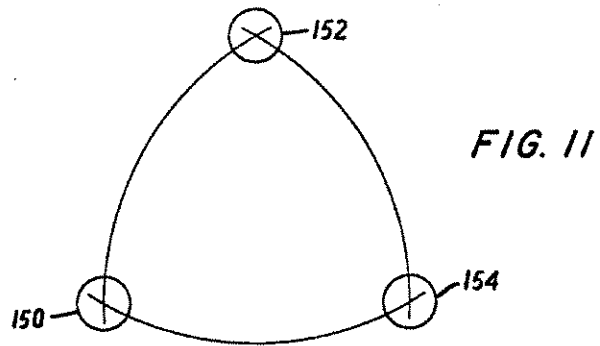
FIG. 10

U.S. Patent

Jun. 26, 1990

Sheet 5 of 13

4,936,587

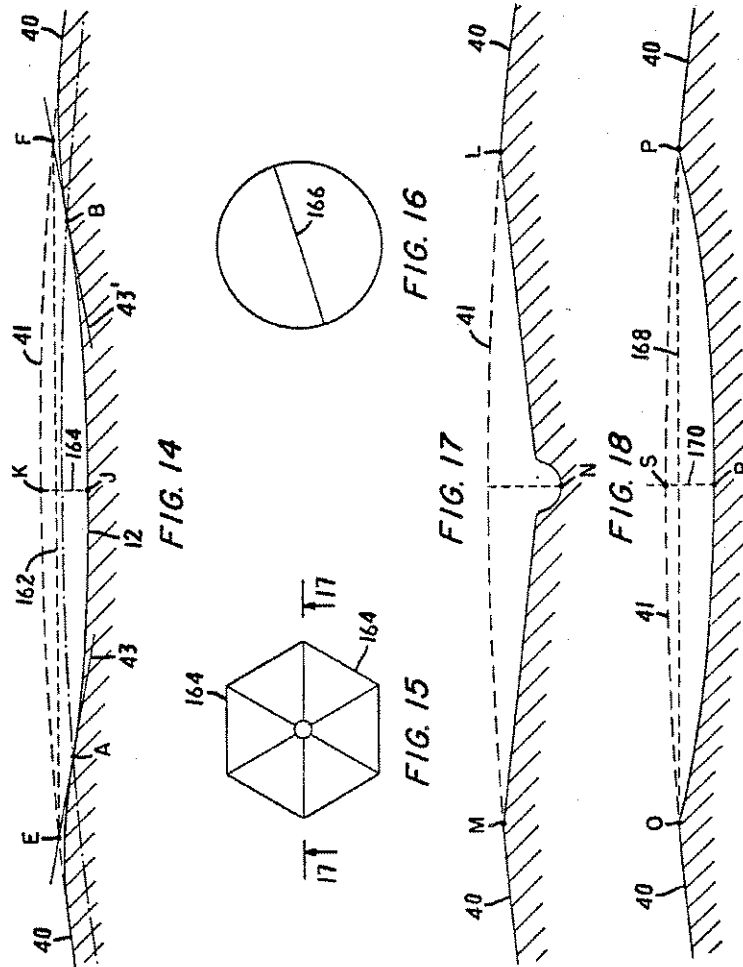


U.S. Patent

Jun. 26, 1990

Sheet 6 of 13

4,936,587



U.S. Patent

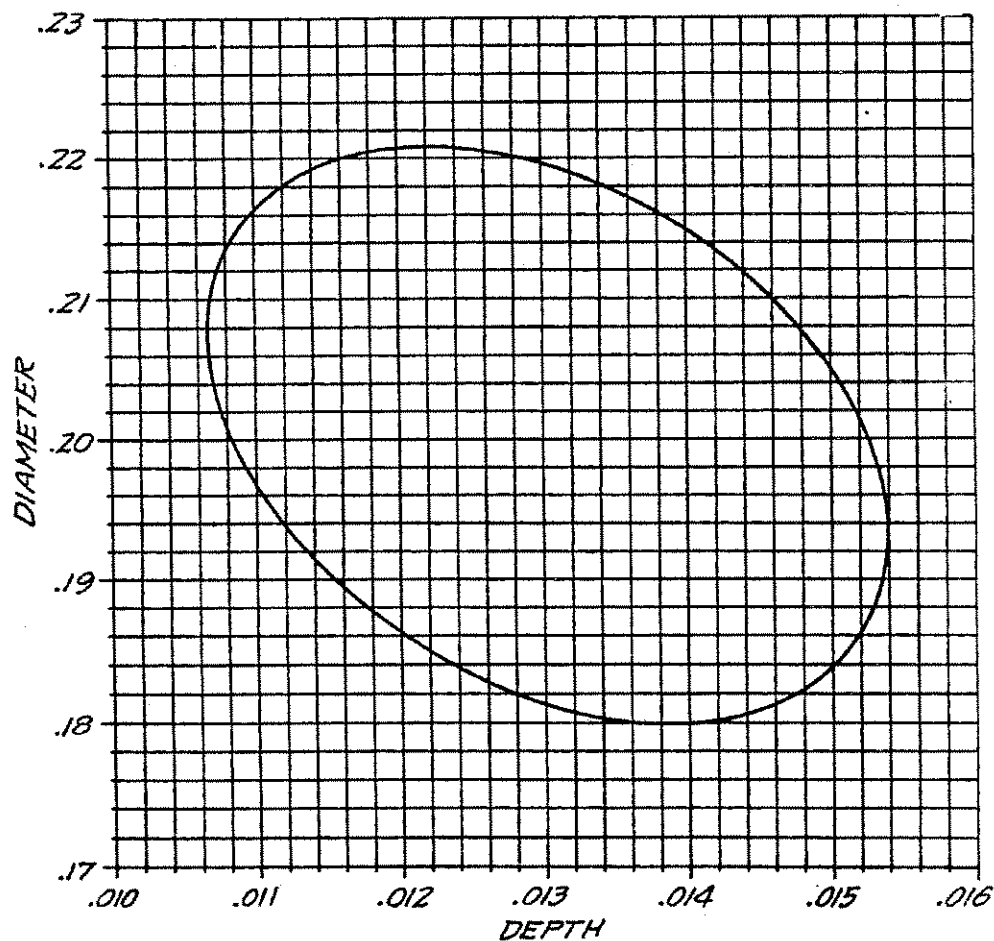
Jun. 26, 1990

Sheet 7 of 13

4,936,587

FIG. 19.

182 DIMPLES (FORMULA 1)



U.S. Patent

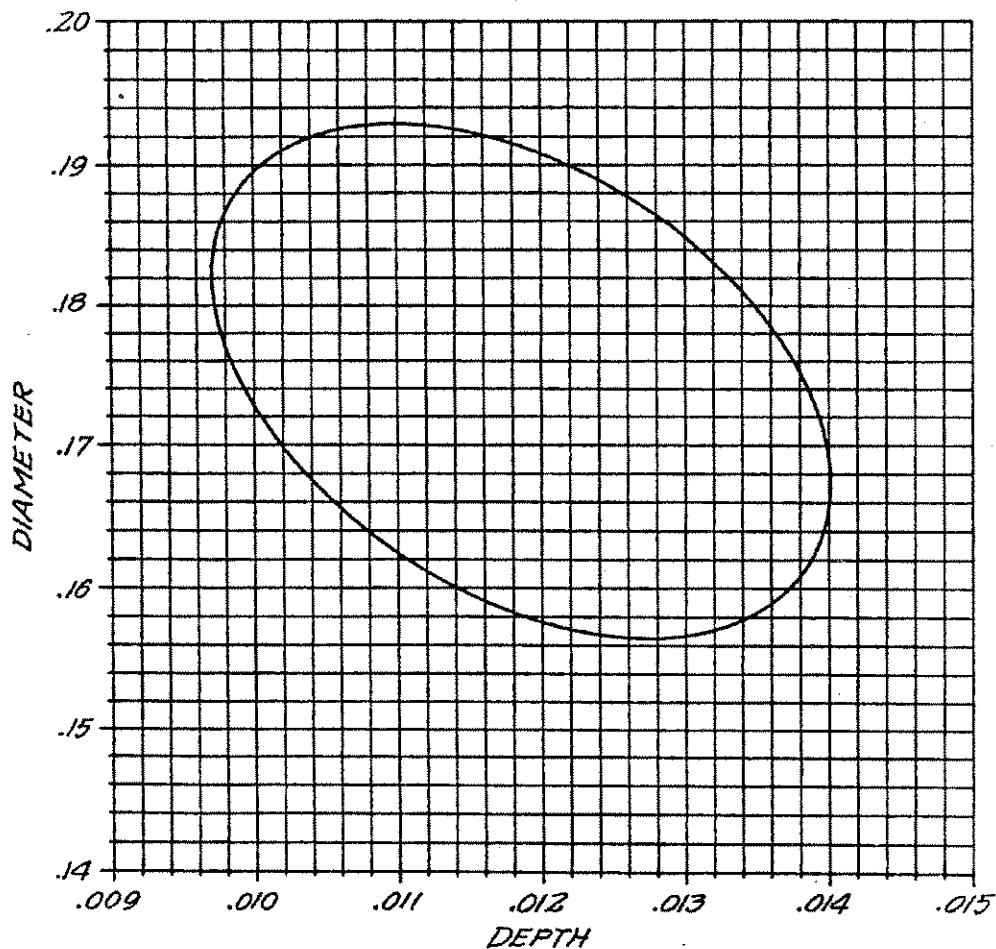
Jun. 26, 1990

Sheet 8 of 13

4,936,587

FIG. 20.

252 DIMPLES (FORMULA 1)



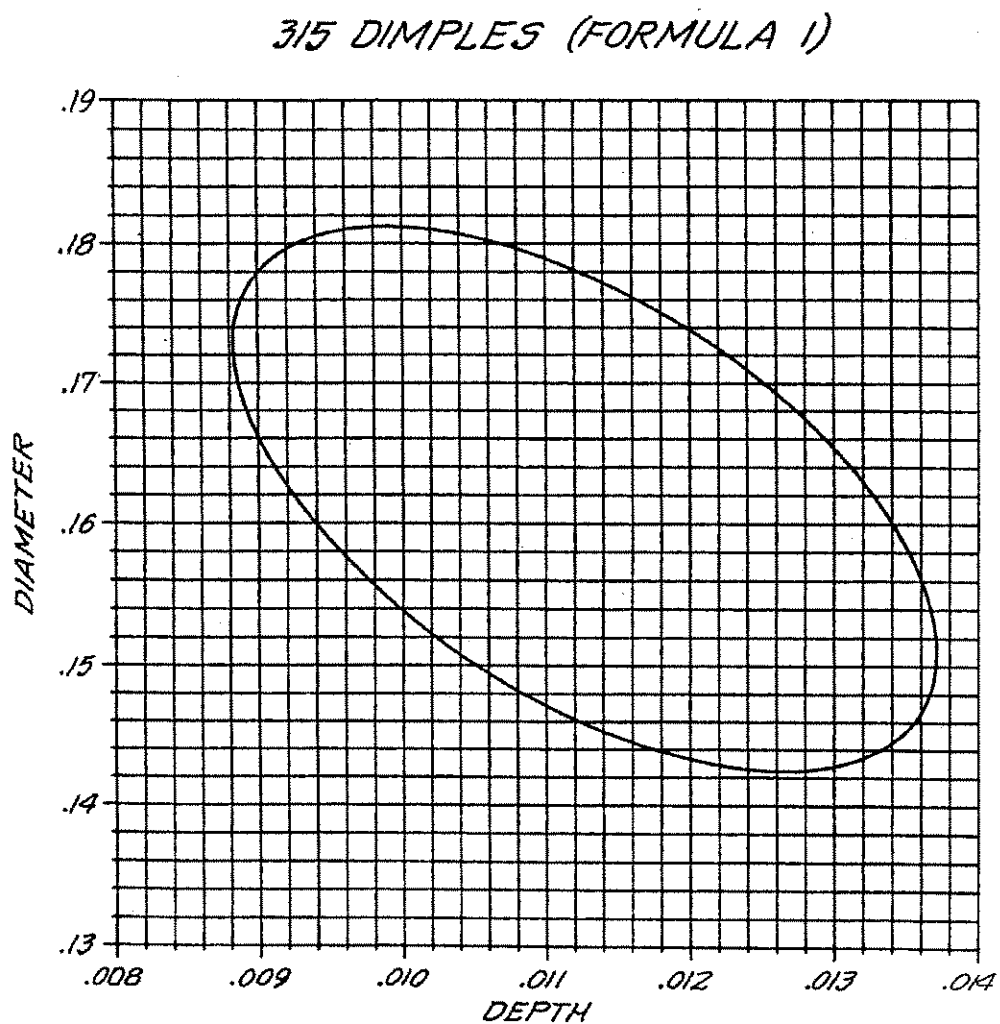
U.S. Patent

Jun. 26, 1990

Sheet 9 of 13

4,936,587

FIG. 21.



U.S. Patent Jun. 26, 1990 Sheet 10 of 13 4,936,587

FIG. 22.

332 DIMPLES (FORMULA 1)

